Forest Stewardship & Restoration Updates

Kitsap County Parks 2025

Meeting Purpose: Share out updates to the Parks Forest Stewardship and Restoration Policy, 10-year Implementation Plan, and provide an opportunity for the community to learn more about the program.

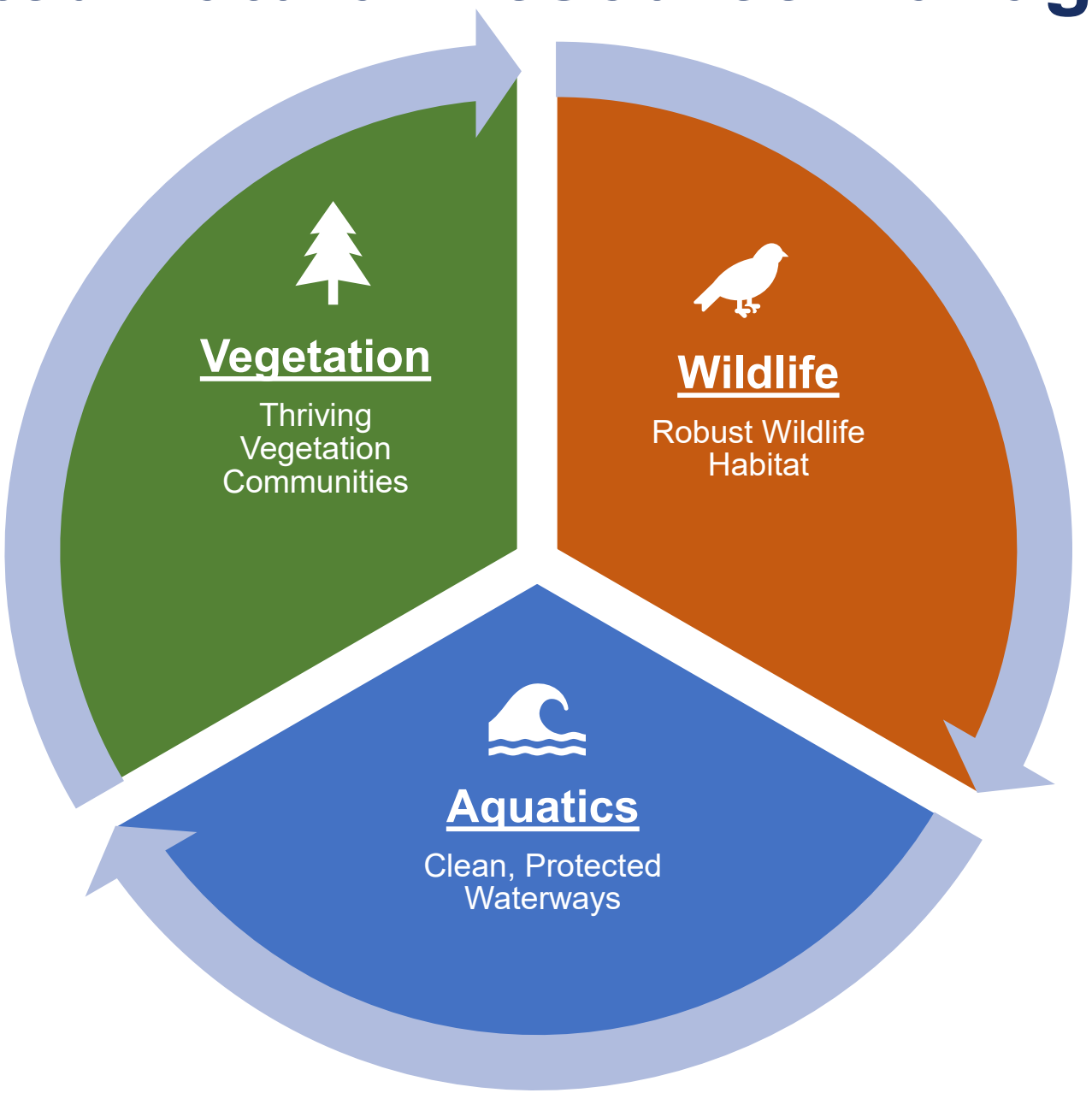
Agenda

- Short Presentation
- Staffed Interaction Stations

Introductions

- Irene Weber: Parks Natural Resources Program Supervisor
- Kevin Ceder: Parks Stewardship Forester
- Chuck Cuzzetto: Parks Communications Coordinator

Integrated Natural Resource Management



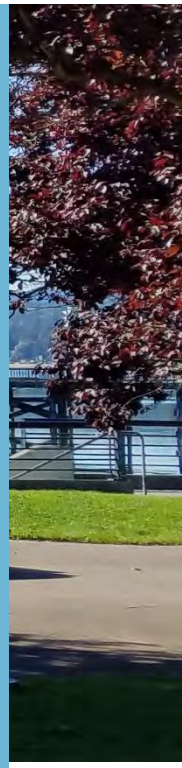
What is Forest Stewardship and Restoration?

Stewardship

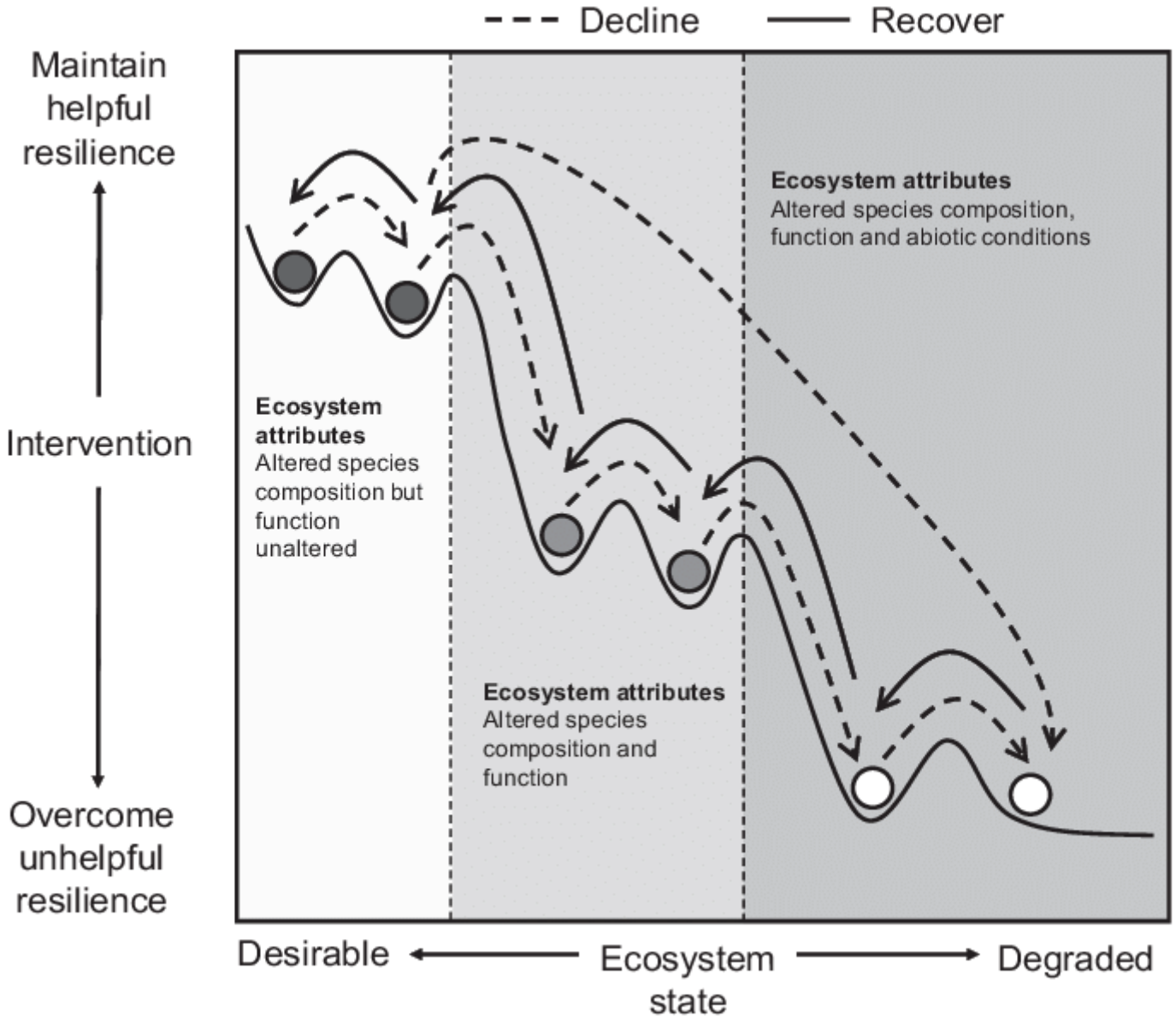
Managing forest and associated resources in a way that enables them to be passed on to future generations in healthy conditions

Restoration

The process of altering the conditions of forests that have departed from desired conditions to improve forest health and ecological function



Restoration helps build and maintain resilient ecosystems



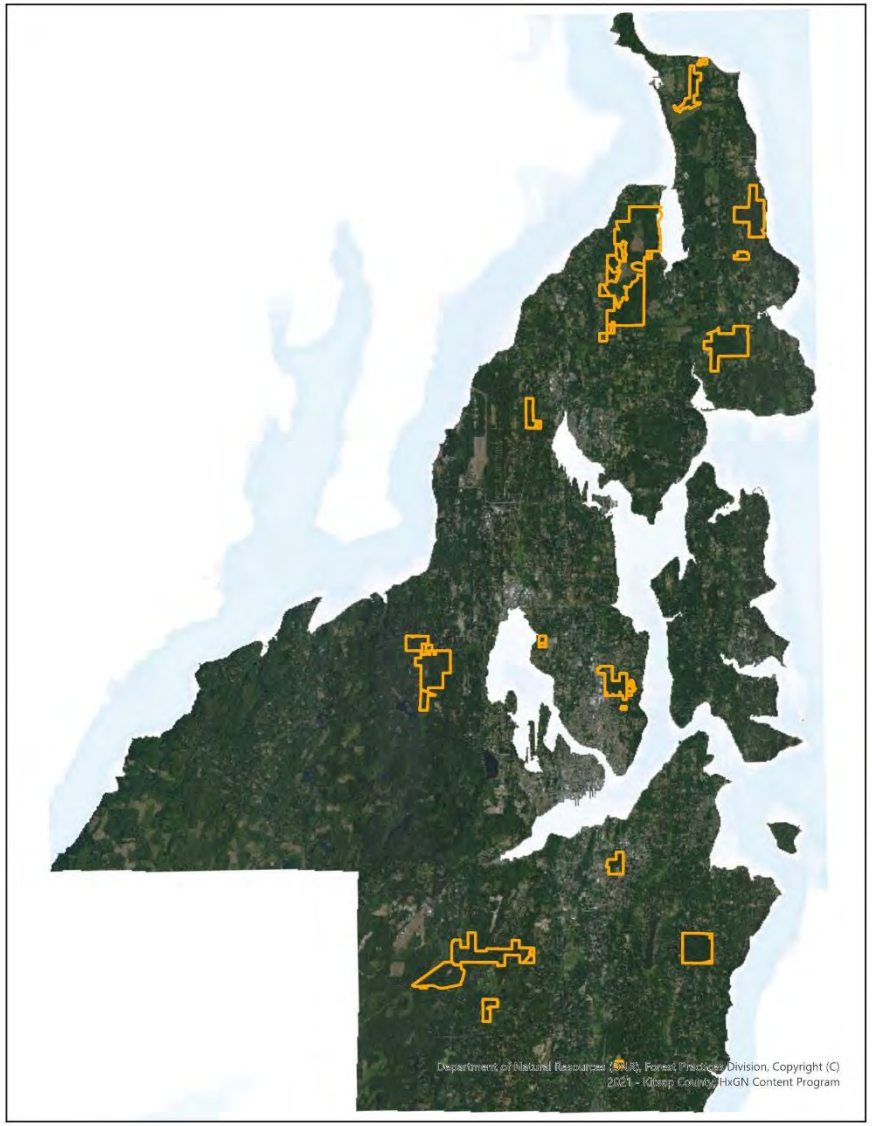
Program Purpose

To create forests in Kitsap County Parks that:

- Have compositions and structures to facilitate the growth of large, vigorous trees that are resilient to stressors
- Provide high quality habitats that have high ecological function,
- Maintain and enhance soil conditions,
- Allow opportunities for public access and cultural foraging and gathering, and
- Are refugia for wildlife and humans in an increasingly developing and urbanizing environment.

Forests in Kitsap County Parks

- Large Kitsap County parks acquired from state or private ownership.
  - Former production tree farms
  - Logged at least once
  - Densely replanted with intent to cut again



Forest Needs

Current conditions in many of our forests:

Trees are stressed with slow growth and low resiliency to insects, diseases, expected climate change, and wildfire

- Ecological functions (habitats, carbon sequestration, etc.) are reduced
- Trees are susceptible to mortality from competition, insects, and diseases
- Forests are too dense from planting for timber production
- Large trees are lacking


40 Years Old


60 Years Old


80+ Years Old

Forest Needs

How do we know:
What the needs are?
What actions we should take?

Forest Needs

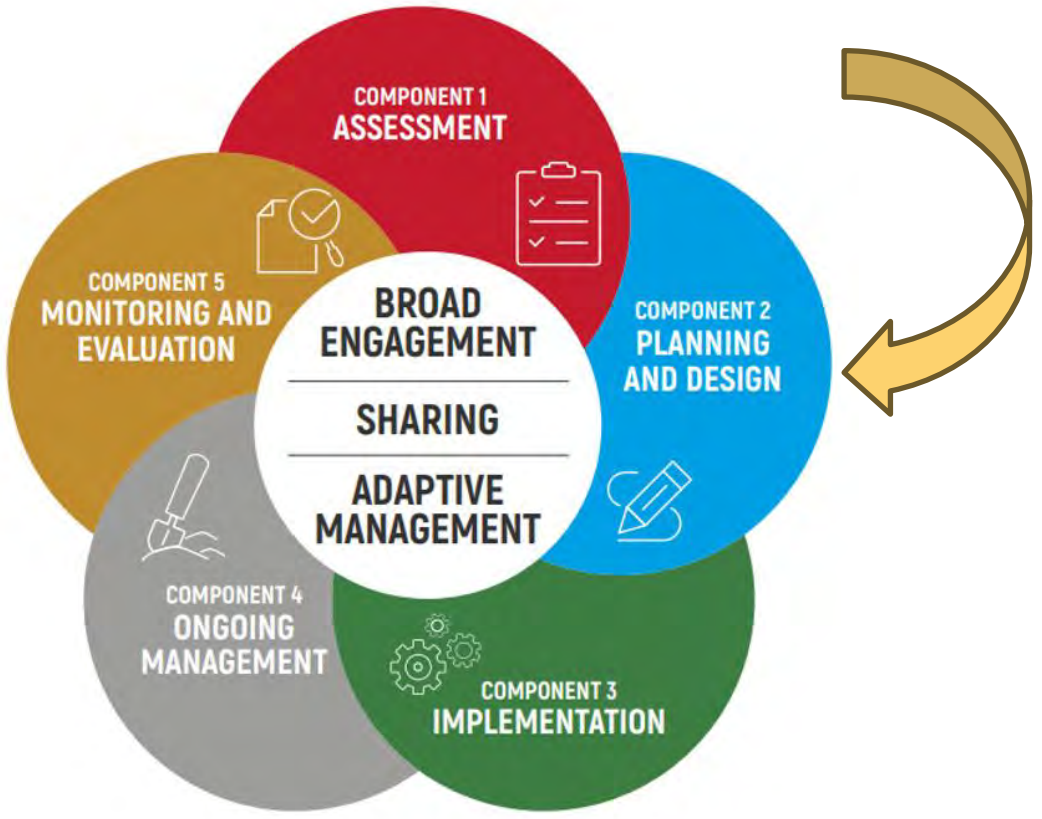
All activities will be based on ecological need.

If the forest doesn't need treatment to meet restoration objectives, it will not be treated.

Projects are never implemented simply to generate profit.

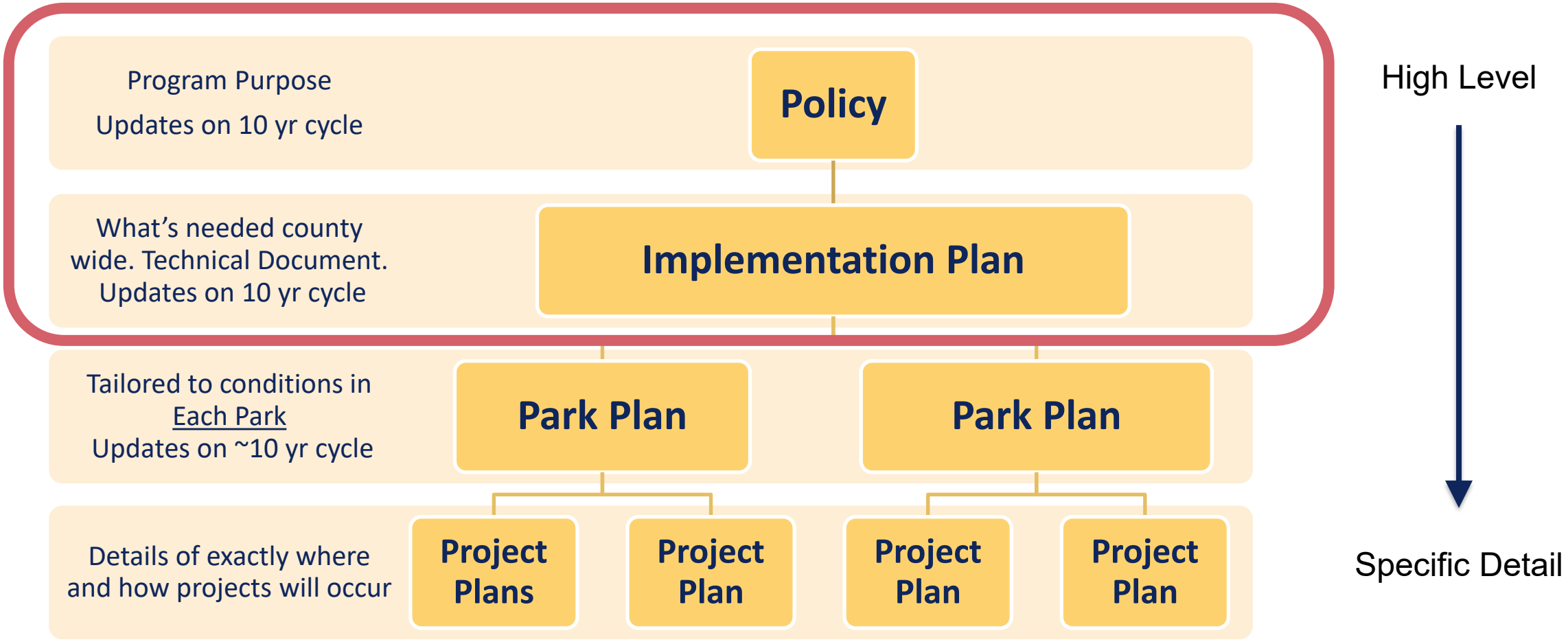
Stewardship and Restoration Process

1. **Assessment**
   a. Quantify current and desired conditions
   b. Determine treatment needs
2. **Planning & Permitting**
   a. Prescribe stewardship and restoration treatments to address needs
   b. Schedule activities to implement treatments
   c. Acquire needed permits
   d. Weigh treatment need vs park/social impact
3. **Implementation & Management**
   a. Perform stewardship and restoration treatments
4. **Monitoring & Evaluation**
   a. Quantify post-treatment conditions
   b. Evaluate progress toward desired conditions
   c. Adjust techniques as needed



From SER: STANDARDS OF PRACTICE TO GUIDE ECOSYSTEM RESTORATION A contribution to the United Nations Decade on Ecosystem Restoration 2021–2030.

Forest Restoration Planning Structure



Forest Restoration Planning Structure

Forest plan tailored to conditions in Each Park
Updates on ~10 yr cycle

Components of this plan will fold into Park Master Planning

Park Plan

- More detailed assessment data
- Considerations for specific parks needs
- Assessment of competing needs (social, wildlife, wetland, etc.)
- Input from public and stakeholders

Details of exactly where and how projects will occur

Project Plans

Project Plan

Project Plan

- Most detailed ecological assessments
- Permitting
- Consultation with DNR, WDFW, Tribes, and other stakeholder groups

Policy

Implementation Plan

Park Forest Plan

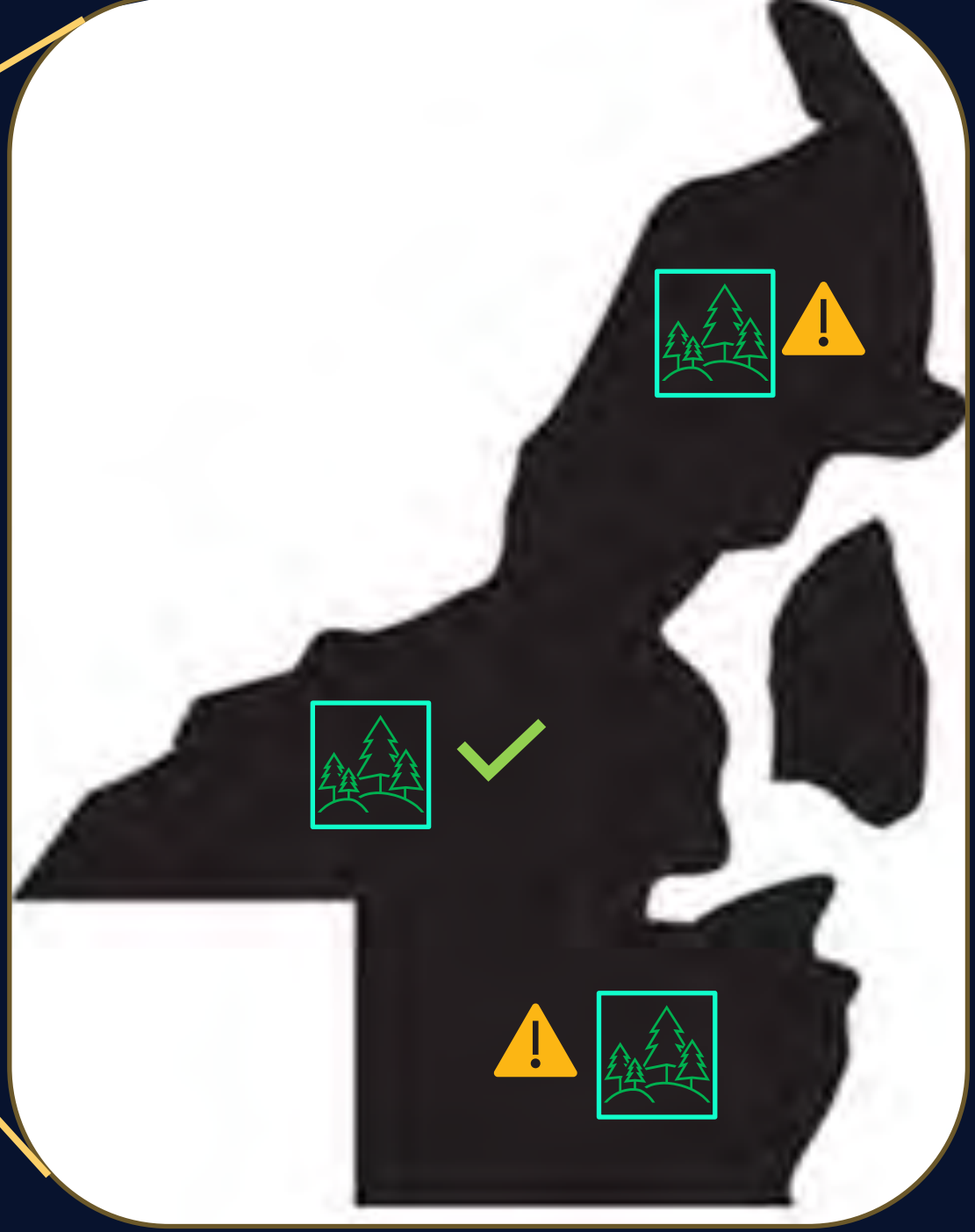
Restoration Project Plan

Policy

Implementation Plan

Park Forest Plan

Restoration Project Plan



Policy

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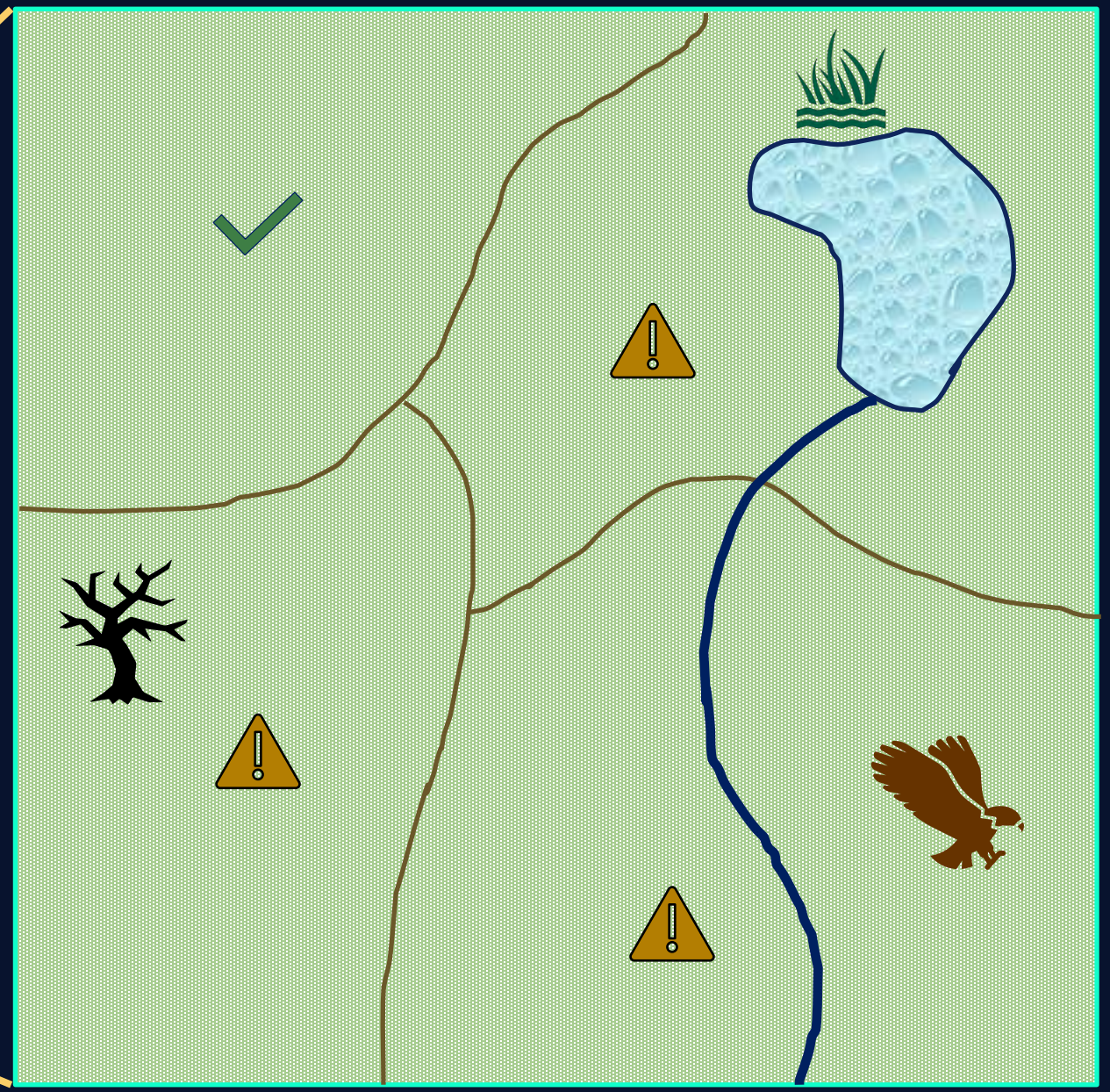

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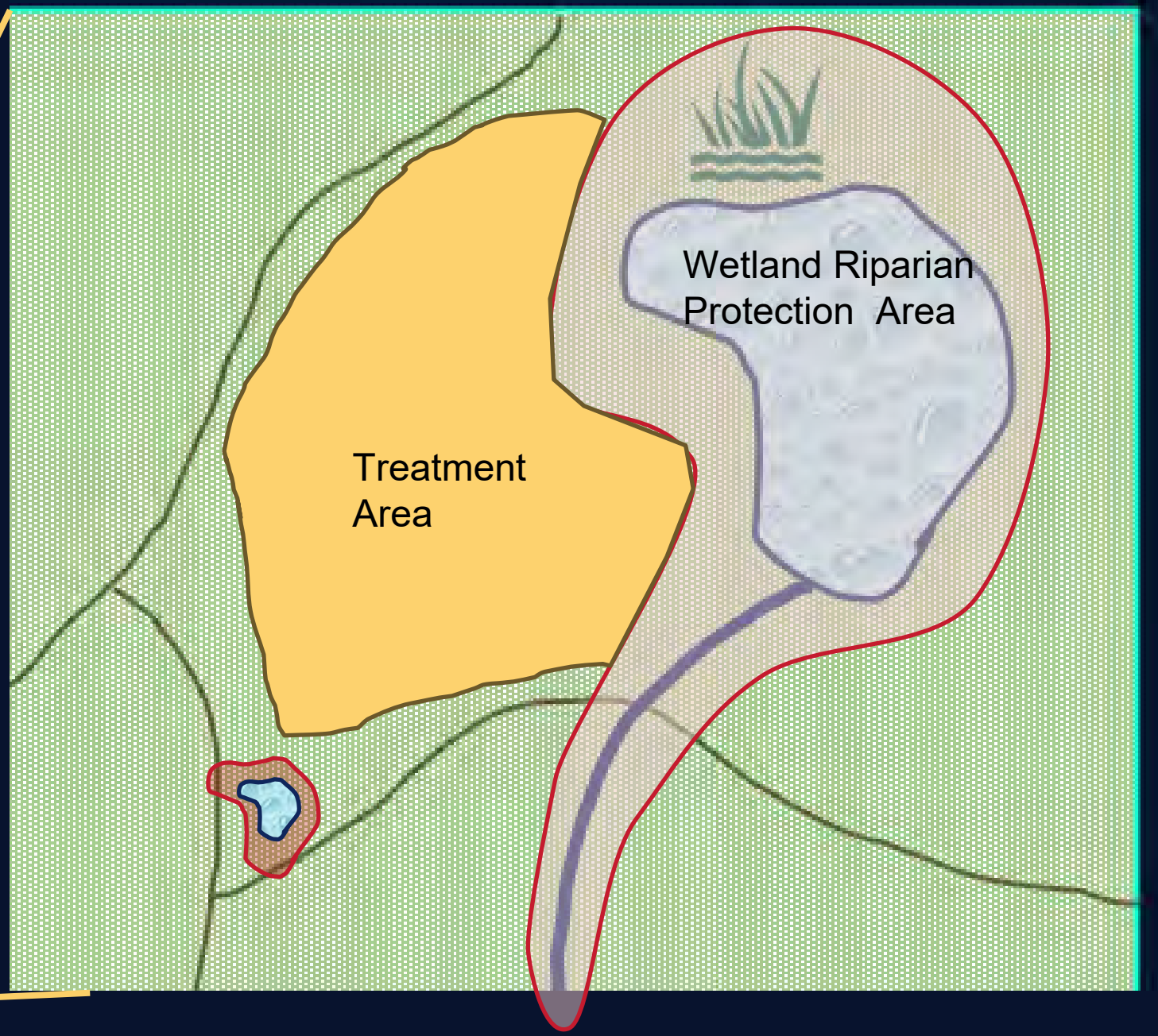

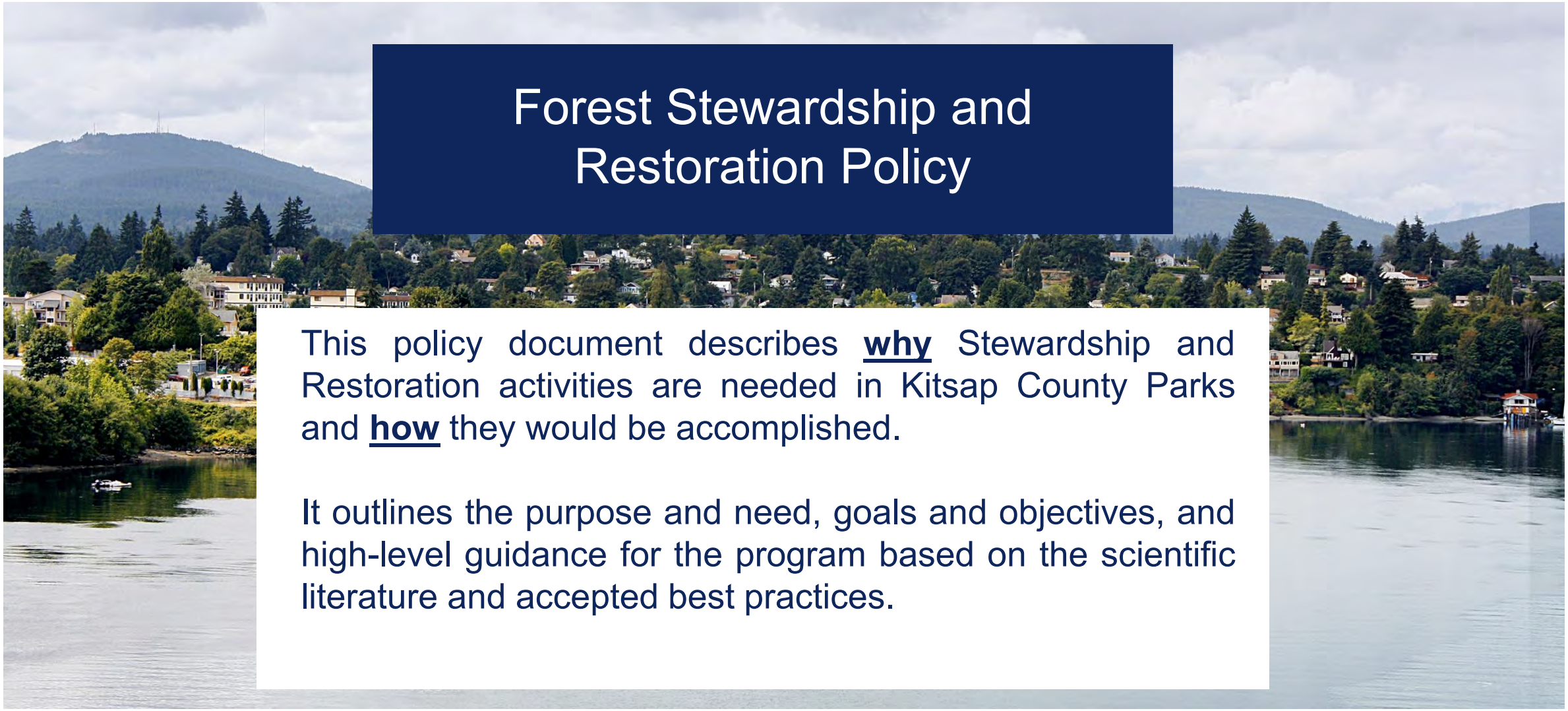

Forest Stewardship and Restoration Policy

This policy document describes **why** Stewardship and Restoration activities are needed in Kitsap County Parks and **how** they would be accomplished.

It outlines the purpose and need, goals and objectives, and high-level guidance for the program based on the scientific literature and accepted best practices.

Program Purpose

To create forests in Kitsap County Parks that:

- Have compositions and structures to facilitate the growth of large, vigorous trees that are resilient to stressors
- Provide high quality habitats that have high ecological function,
- Maintain and enhance soil conditions,
- Allow opportunities for public access and cultural foraging and gathering, and
- Are refugia for wildlife and humans in an increasingly developing and urbanizing environment.

Forest Stewardship and Restoration Implementation Plan

Plan is a technical document that provides a high-level, system-wide plan to **implement** the updated Forest Stewardship and Restoration Policy for the next 10 years – 2025 through 2034. It includes:

- Projected actions needed in the focus parks including assessment, monitoring, planning, permitting, implementation, and management.

- Analysis of past financial performance and future sustainability of the program.

Plan Updates

This update is a revision and expansion of current (2013) implementation plan

- Incorporates and implements updated Forest Stewardship and Restoration Policy
- Leverages updated science and data
- Integrates additional park areas
- Proposes needed stewardship and restoration activities for the coming decade
- Assesses past program performance and future financial sustainability

Forest Stewardship Pilot Program
Implementation Plan
October 1, 2013

What is a Healthy Forest?

- **Large Trees (>24” DBH)**
- Species Composition
- Canopy Layers
- Understory Vegetation
- Large Snags
- Large Downed Logs
- Wildlife Trees

Figure 12. Multiple age classes of Douglas fir trees within the same stand are common in the old forests within the Puget Trough. Point Definance Park in Tacoma has trees up to 240 cm in diameter with charcoal on the bark, yet also has large and old trees with none.

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- **Canopy Layers**
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Photo by WDFW

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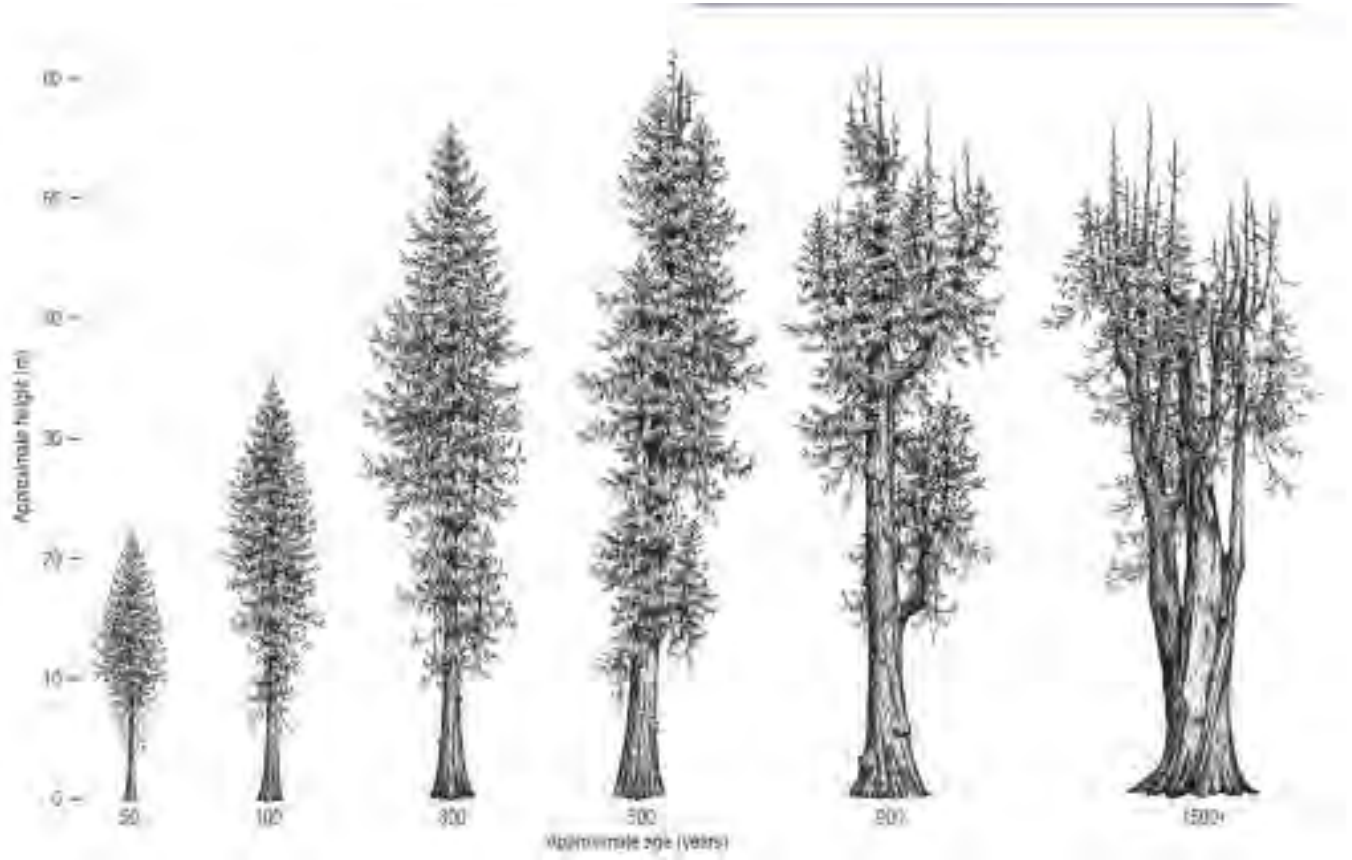


MAKING ROOM FOR BIGGER TREES!

Port Gamble Ranger Corridor

Port Gamble 1000 Road

This forest has too many trees!

- Trees are stressed and growing very slowly
- Dense canopy is suppressing understory vegetation
- Wildlife habitats are degraded
- Trees are dying creating potential hazards

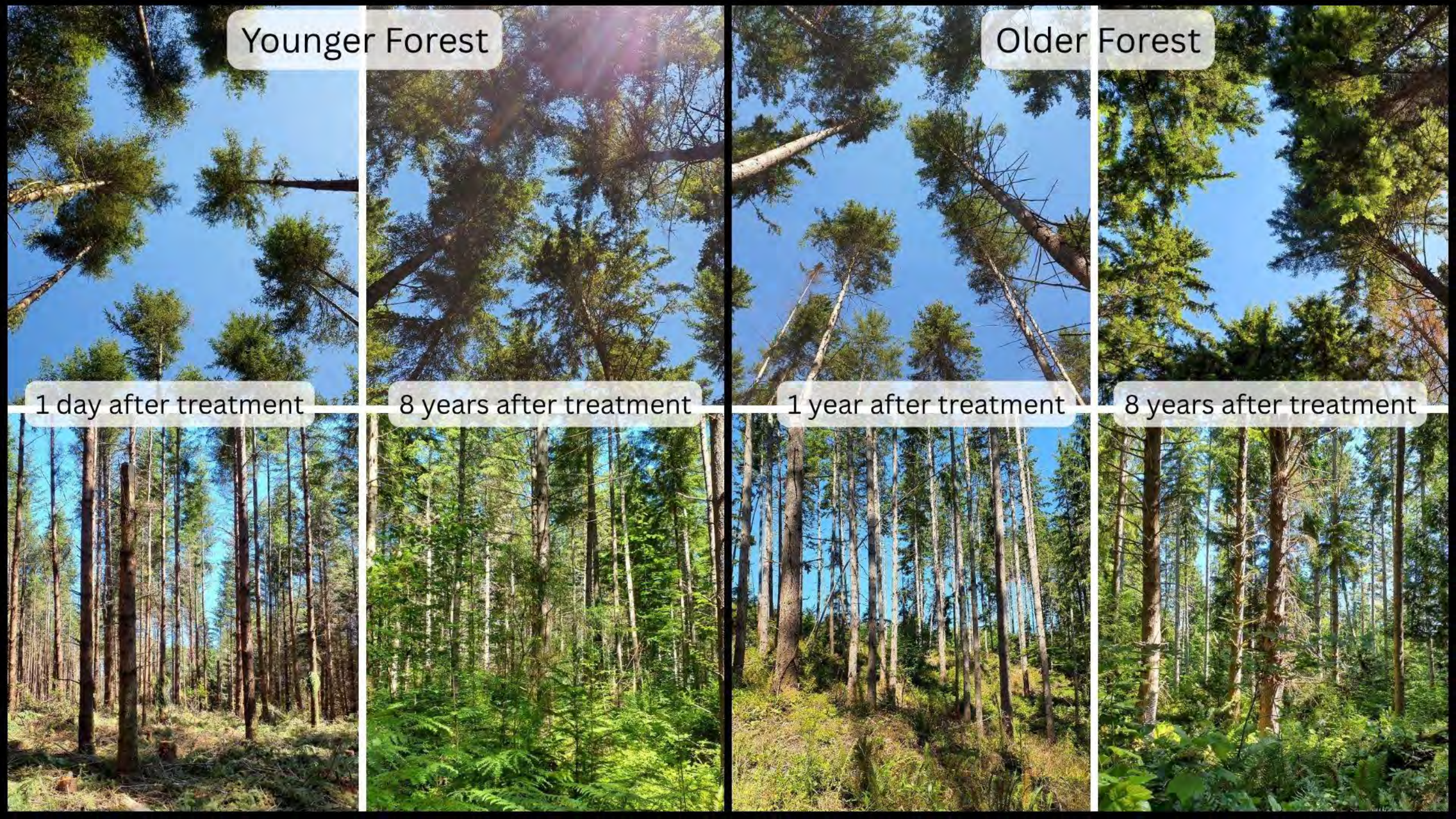
KITSAP COUNTY 18 57 WASHINGTON

For more information contact parks@kitsap.gov

This restoration project will remove some trees to:

- Increase the growth and health of the largest trees
- Revitalize the understory vegetation
- Improve wildlife habitats
- Reduce potential hazards to park users

*Printed on recyclable and biodegradable waterproof paper


Younger Forest
Older Forest
1 day after treatment
8 years after treatment
1 year after treatment
8 years after treatment

Habitat Enhancement

Wildlife habitat enhancement will be coupled with thinning and young stand thinning

- Use smaller wood to create wildlife habitat structure
- Mimic important habitat elements that are lacking
- Opportunities to engage community in stewardship and restoration projects

Species Diversity Plantings

Where needed and appropriate, planting may be used to improve tree and vegetation diversity

- Post-treatment assessments and plant association data guide planting need
- Opportunities to engage community in planting projects

Who else is restoring forests?

Pierce County

WHATCOM COUNTY
WASHINGTON

JEFFERSON LAND TRUST

King County

Seattle

The Nature Conservancy®

Foreseeable Activities 2025-2034

Activity Type	Acres
Assessment/ Monitoring & Evaluation	9,394
Planning	9,394
Permitting	1,445
Management/Implementation-Thinning	1,445
Management/Implementation- Young stand thinning	655

Financial Sustainability

All activities will be based on ecological need.

If the forest doesn't need thinning to meet restoration objectives, it will not be thinned. Projects are never implemented simply to generate profit.

Some ecologically necessary thinning activities generate marketable timber products. These will be sold to help recoup costs of the Forest Stewardship and Restoration Program as has been done for the past 10 years.

Much of the treatments needed in the next 10 years will generate little to no profit. We are seeking grants and other funding options to cover costs.

Preliminary Treatment Needs 2025-2034

Preliminary assessments using publicly available data and field visits suggest treatments are needed over the next 10 years to improve forest growth and health:

- Approximately 1,445 acres of thinning
  - Merchantable trees would be removed
  - Some net revenue is expected
    - Depends on log markets
  - Preliminary schedule treats parks sequentially
    - Order based on ecological need and accessibility
    - Subject to change following public outreach and planning
- Approximately 655 acres of young stand thinning
  - No merchantable trees are removed
  - Will require investment
  - Cost-share programs may defray some of the cost

Thinning

Year(s)	Park(s)	Thinning acreage	Road mileage	Estimated Net Revenue
2025	Port Gamble Forest	110	Minimal	$66,000
	Rude Road Site	20	Minimal	$30,000
2026-2028	Banner Forest	426	3	$691,000
2029-2034	Eglon Forest, North Kitsap, Newberry Hill, Gordon Park, Bandix Dog Park	897	5.5	TBD

Young Stand Thinning

Years	Park(s)	Acreage	Estimated investment
2026-2029	Banner Forest	93	$27,900 - $69,750
	Eglon Forest	98	$29,400 - $73,500
	North Kitsap	127	$38,100 - $95,250
	Newberry Hill	83	$24,900 - $62,250
	Coulter Creek	44	$13,200 - $33,000
2030-2034	Port Gamble Forest	78	$23,400 - $58,500
	Rude Road Site	132	$39,600 - $99,000

2025 Ongoing Projects

Port Gamble

- Approximately 100 acres of thinning
- Planted following harvesting in 1980s
- Excessively dense with stressed trees
- Suppressed understory
- Degraded wildlife habitat
- Timing: June-November

2025 Kitsap County Parks Forest Stewardship and Restoration Outreach Form

FOREST RESTORATION SITE VISITS

- **Port Gamble Forest Heritage Park** – Monday, July 28 | 5–6:30 PM
  Theme: Forestry Present
  Meet at Bayview Trailhead (47.840016, -122.587606)
- **Newberry Hill Heritage Park** – Tuesday, July 29 | 5–6:30 PM
  Theme: Forestry Past
  Meeting location: Klahowya Entrance (47.6352028, -122.755664)
- **Banner Forest Heritage Park** – Wednesday, July 30 | 5–6:30 PM
  Theme: Forestry Future
  Meet at main Banner parking lot off Banner Rd SE (47.489050, -122.545850)

2025 Ongoing Projects

Port Gamble

- Approximately 100 acres of thinning
- Planted following harvesting in 1980s
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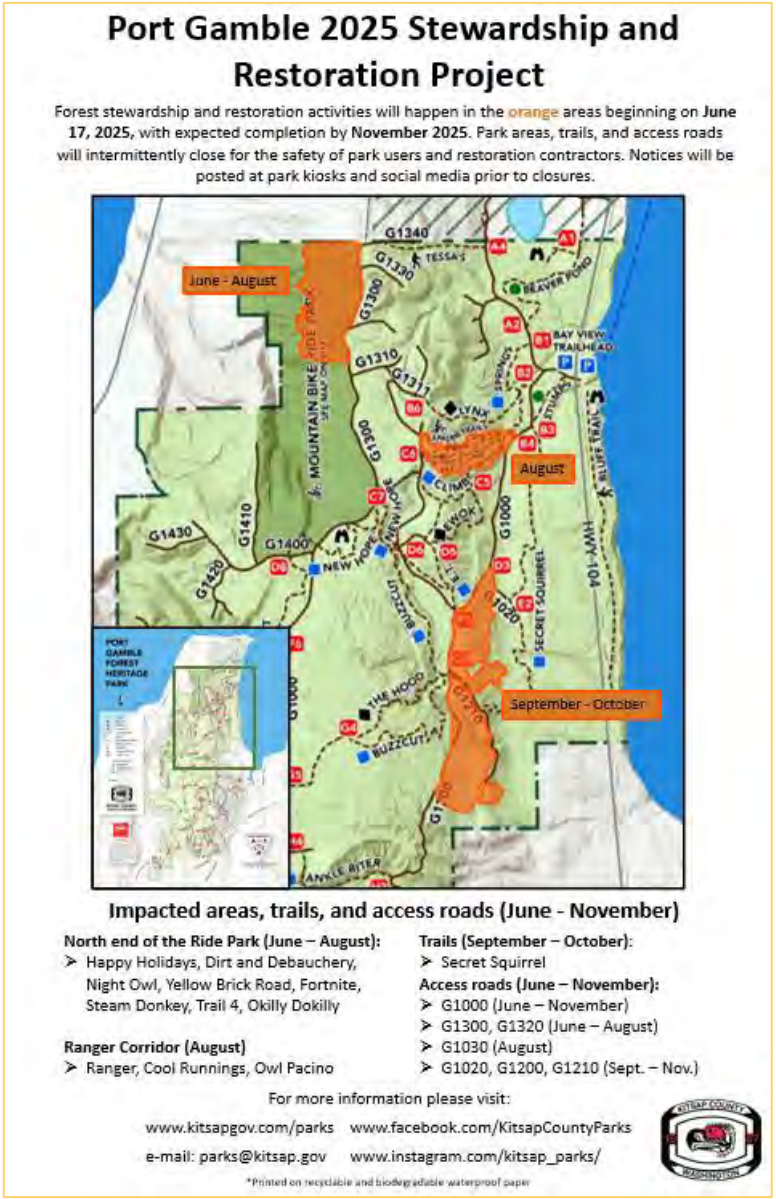
- Degraded wildlife habitat
- Timing: June-November

- ADD PHOTOS



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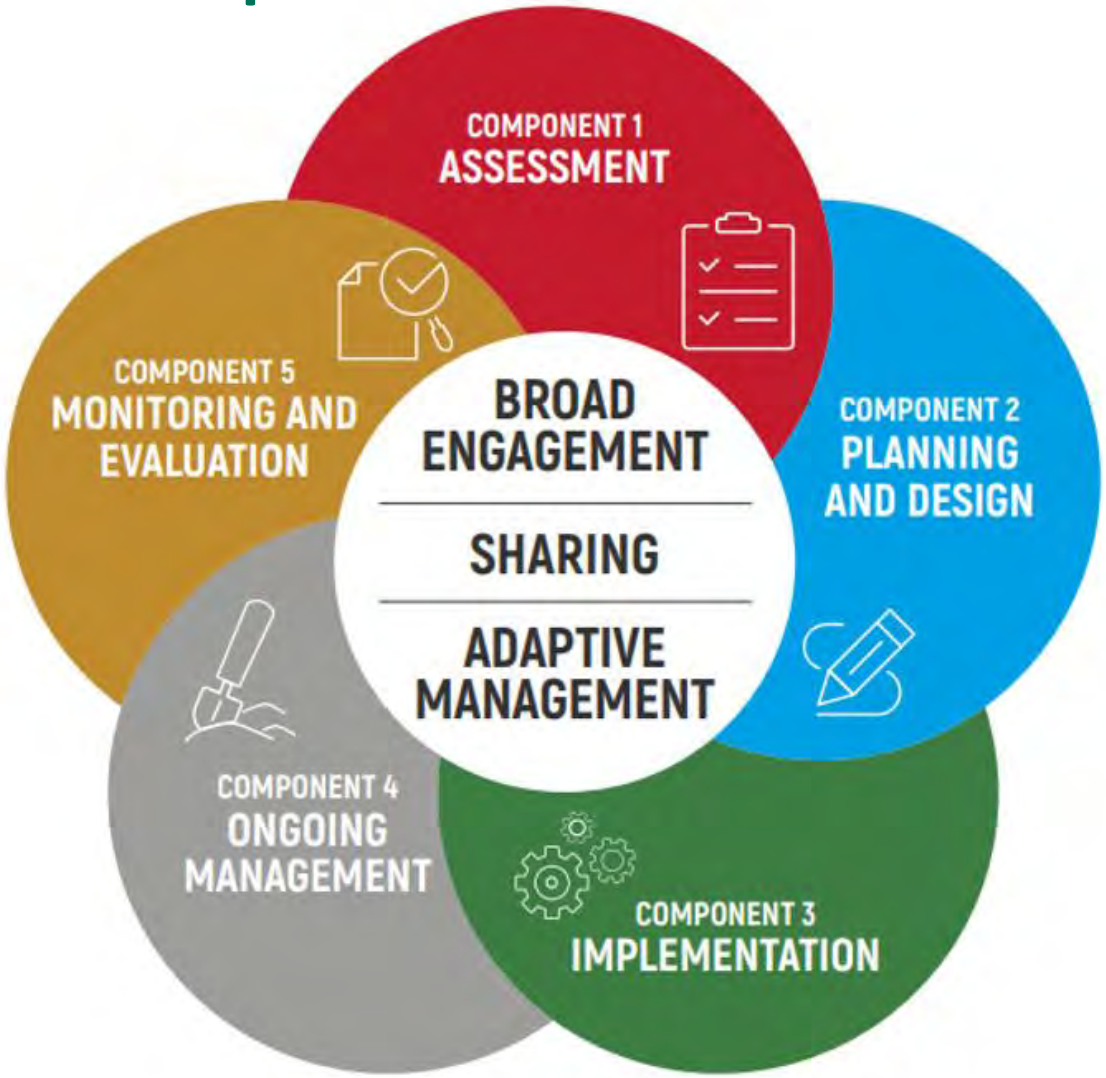
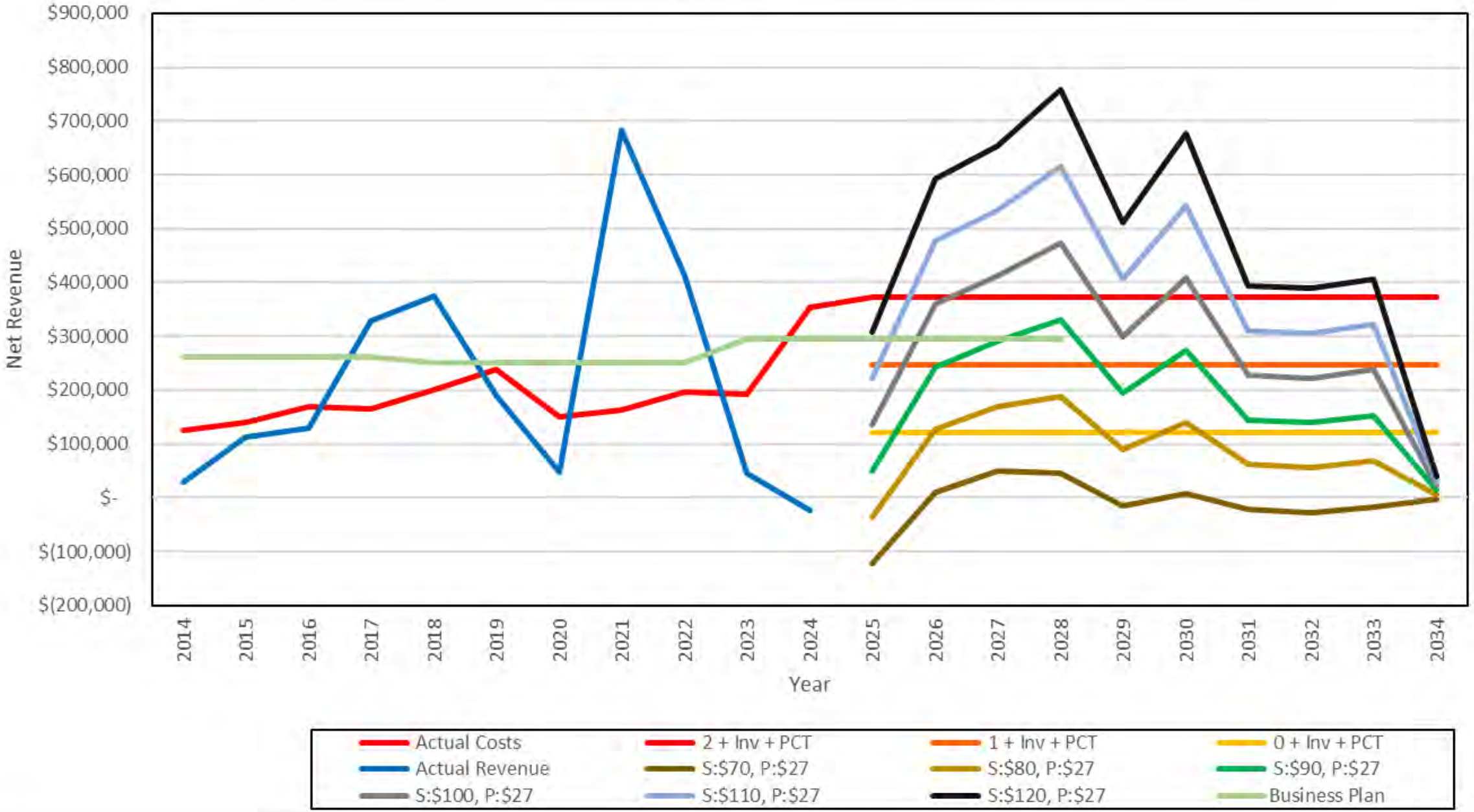
- **Banner Forest Heritage Park** – Wednesday, July 30 | 5–6:30 PM Theme: Forestry Future Meet at main Banner parking lot off Banner Rd SE (47.489050, -122.545850)

Stewardship and Restoration Process

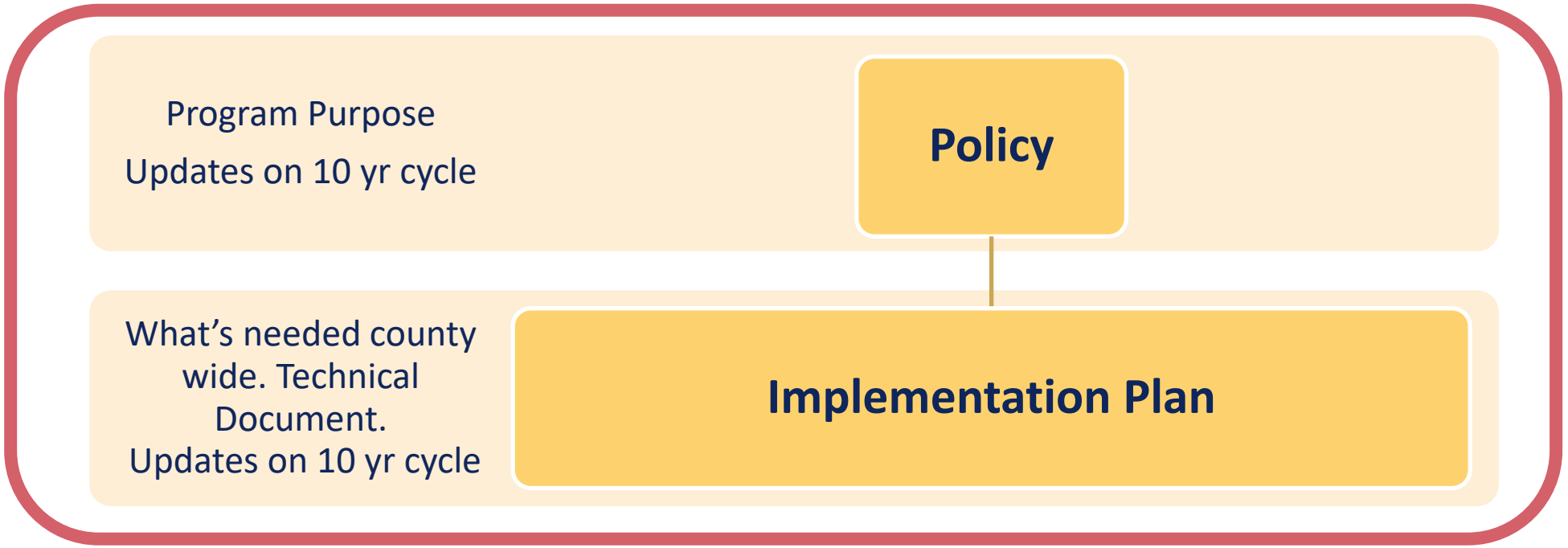


From SER: STANDARDS OF PRACTICE TO GUIDE ECOSYSTEM RESTORATION A contribution to the United Nations Decade on Ecosystem Restoration 2021–2030.

Actual and Projected Net Revenues and Program Costs Under Different Cost and Log Price Scenarios



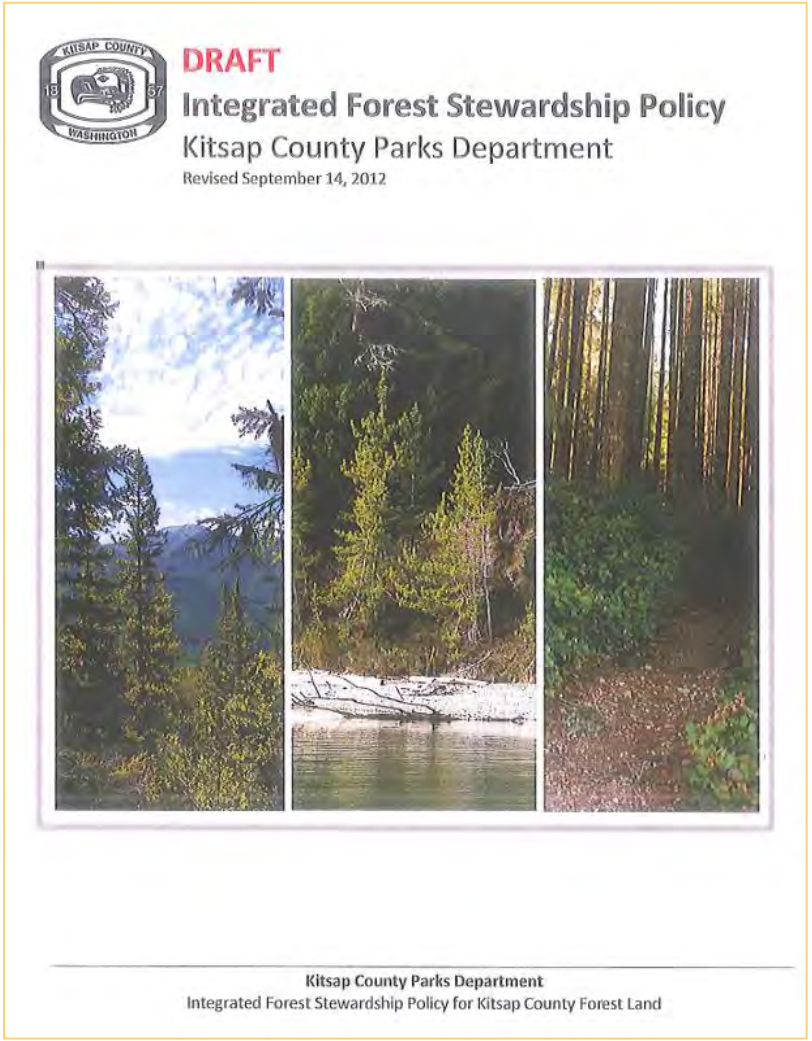
Forest Restoration Planning Structure



Policy Updates

This update is a revision and expansion of current (2012, 2015) policies

- Maintains primary goals of the previous policies
- Expands on the goals and adds objectives and measurable criteria
- Adds updated science, data, and structure
- Incorporated input from external reviewers
- Tightens focus on forest restoration and resiliency:
  - Covers forest trees, vegetation, habitats, access roads, soils, riparian areas, wetlands, streams, and other aquatic resources



Policy External Reviewers

Michael Case, PhD – Forest Ecologist, The Nature Conservancy

Debbie Kay – Forest Ecologist, Suquamish Indian Tribe

Adrian Wolf – Stewardship Manager, Great Peninsula Conservancy

Margaret Kreder – Stewardship Forester, Mason Conservation District

Elaine Oneil, PhD – Executive Director, Washington Farm Forestry Association

Dee Dee Korsikas-Fogg – Natural Lands Forester, Pierce County Parks

The Nature Conservancy

Suquamish Tribe

Pierce County

Washington Farm Forestry Association
Stewards of the Land For Generations to Come

MASON CONSERVATION DISTRICT

Great Peninsula Conservancy
25th Anniversary

Forest Stewards Guild

Principles

1. The well-being of human society is dependent on responsible forest management that places the highest priority on the maintenance and enhancement of the entire forest ecosystem.

2. The natural forest provides a model for sustainable resource management; therefore, responsible forest management imitates nature's dynamic processes and minimizes impacts when harvesting trees and other products.

3. The forest has value in its own right, independent of human intentions and needs.

4. Human knowledge of forest ecosystems is limited. Responsible management that sustains the forest requires a humble approach and continuous learning.

5. The practice of forestry must be grounded in field observation and experience as well as in the biological sciences. This practical knowledge should be developed and shared with both traditional and non-traditional educational institutions and programs.

6. Our first duty is to forests and their future. When confronted with circumstances that threaten the integrity of the forest and conflict with the Mission and Principles of the Forest Stewards Guild, members must respond through education, advocacy, or where necessary, disassociation. Guild membership signifies a commitment to the highest forest stewardship ethic.

Foreseeable Activities 2025-2035

Each step of the stewardship and restoration process has activities

- Assessment/Monitoring & Evaluation
  - 10-year park assessment cycle
  - ~940 acres/year
- Planning
  - 10-year park plan update cycle
  - 1-2 plans/year following assessment
- Permitting
  - Permitting follows plan schedules
  - ~150 acres/year
- Management/Implementation
  - Follows permitting
  - ~150 acres a year of thinning
  - ~70 acres a year of young stand thinning

Activity Type	Acres
Assessment/ Monitoring & Evaluation	9,394
Planning	9,394
Permitting	1,445
Management/Implementation- Thinning/Roadwork	1,445
Management/Implementation- Young stand thinning	655

What is a Healthy Forest?

- Determining Desired Conditions
- Elements of mature and older forest guided by the scientific literature and forest practices regulations
- Provides reference points for:
  - Determining treatment needs
  - Tracking restoration progress

Element		Desired Conditions	Guidance source
Large Trees (>24” DBH)		8 or more per acre	USDA Forest Service 2023. Table 14. Western hemlock plant association zone.
Species composition	Overstory: Primarily DF	55-65%	Chappell 2006. Douglas-fir – western hemlock / evergreen huckleberry plant association
	Understory: WH, RC, WP	30-50%	Chappell 2006. Douglas-fir – western hemlock / evergreen huckleberry plant association
Canopy layers		2 or more	USDA FS 1993. Western hemlock series
Understory vegetation cover		50-70%	Chappell 2006. Primarily, Douglas-fir – western hemlock / evergreen huckleberry plant association
Large (>12” DBH) snags		2 or more per acre	Size: WAC 222-30-020 Number: Mellen-McLean 2017. Westside lowland conifer hardwood forest. Late structure
Large (>12” dia., >20’ long) downed logs		10 or more per acre	Size: WAC 222-30-020 Number: Mellen-McLean 2017. Westside lowland conifer hardwood forest. Late structure
Wildlife trees (forks, large branches, crooks, broken tops) > 12” DBH		2 or more per acre	WAC 222-30-020

2025 Upcoming Projects

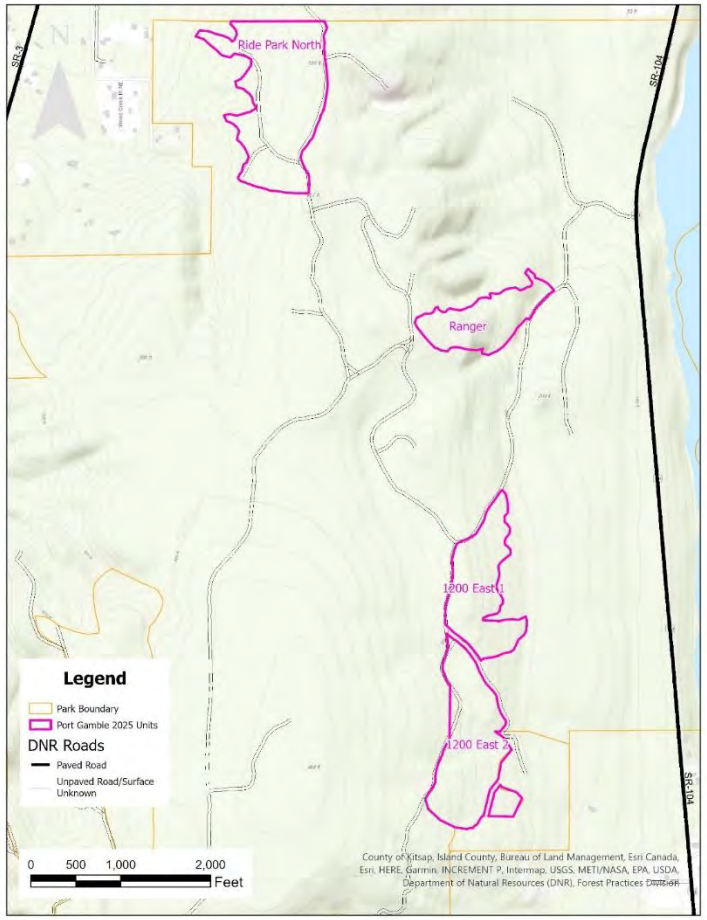
Port Gamble

- Approximately 100 acres of thinning
- Planted following harvesting in 1980s
- Excessively dense with stressed trees
- Suppressed understory
- Degraded wildlife habitat
- Expected timing: June-November

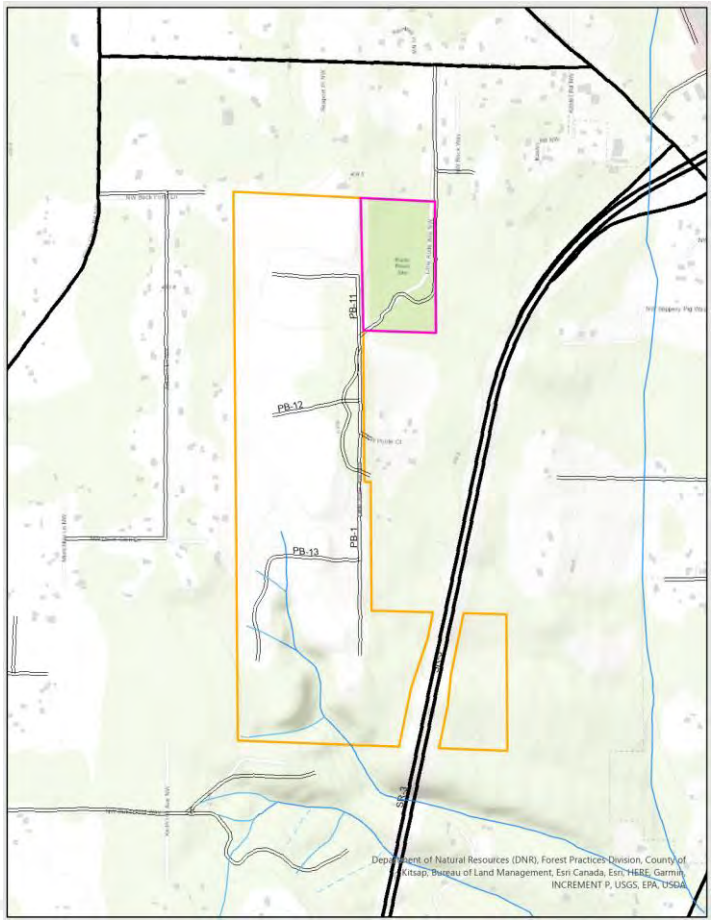
Rude Road Site

- Transfer to Parks to ensure unique forest is maintained as public open space.
- Approximately 20 acres of thinning
- Naturally regenerated after harvesting in early 1900s
- Dense and lacking large trees
- Single canopy layer
- Lacking species diversity
- Understory suppressed/declining
- Degraded wildlife habitat
- Expected timing: Late 2025

Port Gamble



Rude Road Site



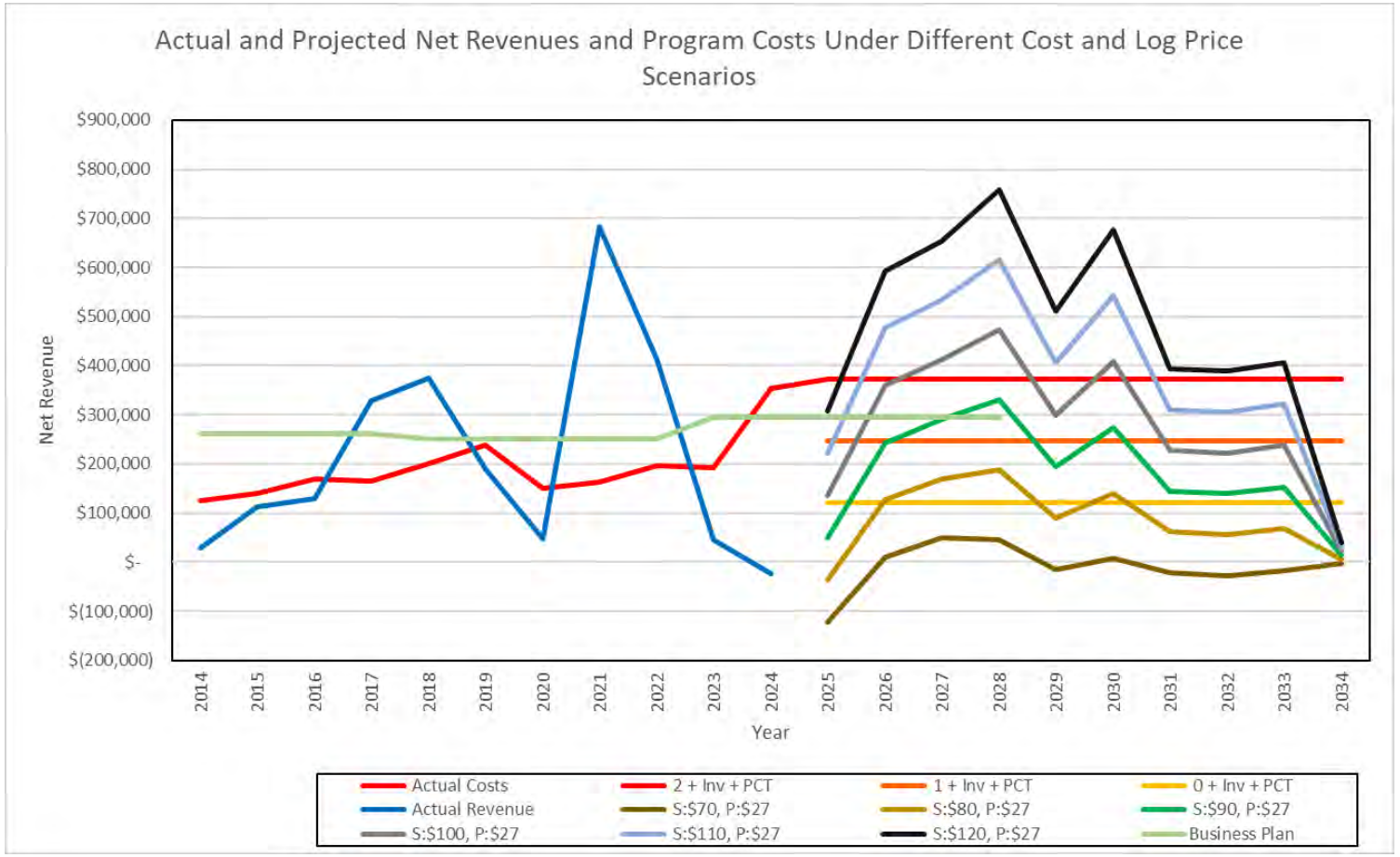
Financial Sustainability

Past stewardship and restoration revenues have been highly variable.

- Depended on log markets and tree sizes
- Overall, it was sustainable

The future is uncertain

- Difficult to know where the log market will go
- Forests needing treatment will produce small, low value logs
- Supporting 2 FTEs has increased costs
- Investments are needed to:
  - Ensure young stands develop toward desired conditions
  - Provide high quality data for assessment and planning



Activities in the first 10 years

Park		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Park Total
Newberry Hill	Acres	130						163					293
	Volume	681						1,454					2,135
Newberry Hill, North Kitsap	Acres		156										156
	Volume		1,062										1,062
Newberry Hill, Port Gamble	Acres			230									230
	Volume			1,326									1,326
Port Gamble, South Kitsap, Newberry Hill	Acres				385								385
	Volume				2,197								2,197
Coulter Creek	Acres					381	332	162					875
	Volume					1,786	1,832	352					3,970
Square Lake	Acres								109	37			146
	Volume								1,961	594			2,556
Wicks Lake	Acres									69			69
	Volume									605			605
Port Gamble	Acres										246	67	313
	Volume										1,325	514	1,839
Annual Total	Acres	130	156	230	385	381	332	325	109	106	246	67	**2,467**
	Volume	681	1,062	1,326	2,197	1,786	1,832	1,806	1,961	1,199	1,325	514	**15,690**
	Net Income	$ 29K	$ 113K	$ 129K	$ 329K	$ 374K	$ 190K	$ 48K	$ 683K	$ 412K	$ 45K	$ (24K)	**$ 2,329K**

Future Treatment Needs

Preliminary assessments using publicly available data and field visits suggest treatments are needed over the next 10 years to improve forest growth and health:

- Approximately 1,445 acres of thinning
  - Merchantable trees would be removed
  - Some net revenue is expected
    - Depends on log markets
- Approximately 655 acres of young stand thinning
  - No merchantable trees are removed
  - Will require investment
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Thinning

Year(s)	Park(s)	Thinning acreage	Road mileage	Estimated Net Revenue
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Young Stand Thinning

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	North Kitsap Heritage Park	127	($38,100 - $95,250)
	Newberry Hill Heritage Park	83	($24,900 - $62,250)
	Coulter Creek Heritage Park	44	($13,200 - $33,000)
2030-2034	Port Gamble Forest	78	($23,400 - $58,500)
	Rude Road Site	132	($39,600 - $99,000)

Communication Strategy

- Make well documented and data driven restoration decisions
  - Clearly explain the need for treatments and expected impacts, both short- and long-term
  - Includes considerations of social and recreational need/impacts
- Communicate project implementation widely and well in advance, “No Surprises”
- Provide opportunities for community involvement in implementation of habitat enhancement projects
- Enlist communication and education help from collaborators
  - Great Peninsula Conservancy
  - WA Department of Natural Resources
  - Northwest Natural Resource Group
- Enhance on-site signage during all phases of project

2024

Policy and Plan Development

Policy update presented to PAB

2025

JUNE

Return to PAB Sub Committee to discuss Implementation Plan

JULY

Public Meeting

Public comment period

AUGUST

PAB Presentation.

BOCC Touchpoint

SEPTEMBER

Final approvals

Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec

Public Meeting

- One public meeting is planned for July.
- This will be an education and outreach event intended to inform the community specifically about the updates to the policy and implementation plan.
- Community will be able to ask questions and comment.
- Site tours are also planned for additional engagement opportunities

Additional Outreach and Education:

- Educational site tours planned for summer and fall of 2025
- Educational booth at the EMBA Hot Laps event at Port Gamble in May
- Meetings with various interested groups including: Poulsbo Rotary, WSU Extension Stream Stewards, park stewards and volunteers.
- Updated Webpage

Anticipated Public Response

- Forest Program is entering its 2nd decade
- Community in North and Central Kitsap are more acquainted with the work
- South Kitsap remains skeptical
  - High profile 136 ac root rot treatment at South Kitsap Regional Park
  - Low profile ~1,100 ac of work at Coulter Creek and Wicks Lake
  - Many concerns about Banner, where much work is needed
- Past work has not always been well or broadly communicated
- Concerns about invasive species
- Misconception that this work is primarily to “make money”
- Science vs Social based decisions

Possible controversial projects by district

North District:

- North Kitsap:
  - Access issues
  - Passionate community
- Eglon:
  - New parcel
  - Development fears
- Hansville Greenway:
  - Assessment and plan needed
  - Passionate community

Central District:

- Illahee Preserve:
  - Extensive forest health issues
  - “Preserve” status
  - Passionate community

South District:

- Banner Forest:
  - Poor past communication
  - Extensive work needed
  - Conservation easement needs modification
  - Passionate community

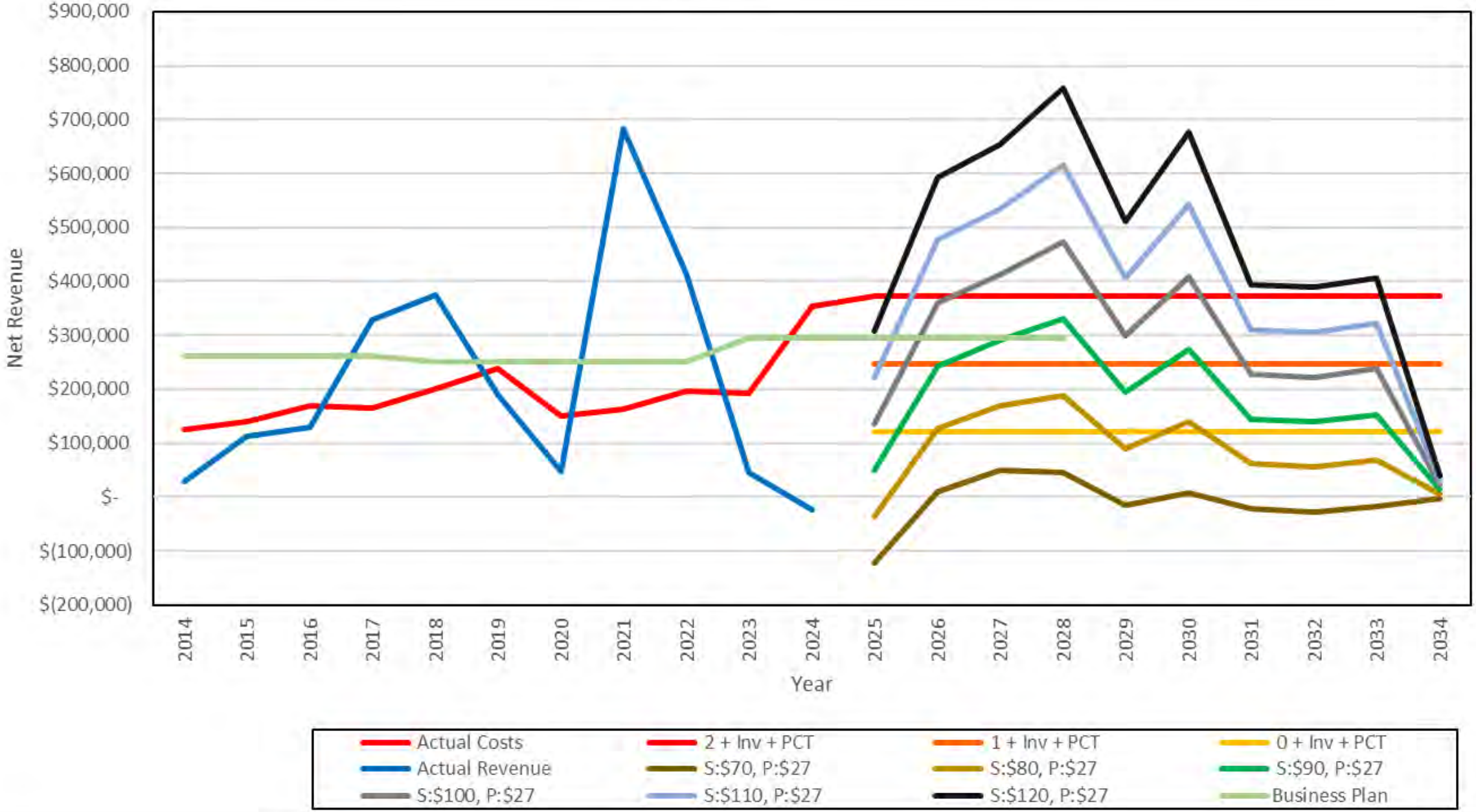
Foreseeable Activities

Each step of the stewardship and restoration process has activities

- Assessment/Monitoring & Evaluation
  - 10-year park assessment cycle
  - ~940 acres/year
- Planning
  - 10-year park plan update cycle
  - 1-2 plans/year following assessment
- Permitting
  - Permitting follows plan schedules
  - ~150 acres/year
- Management/Implementation
  - Follows permitting
  - ~150 acres a year of thinning
  - ~70 acres a year of young stand thinning

Activity Type	Acres			
	~~2025~~	~~2026-2027~~	~~2028-2034~~	Total
Assessment/ Monitoring & Evaluation	~~857~~	~~1,913~~	~~6,924~~	9,394
Planning	~~857~~	~~1,454~~	~~7,383~~	9,394
Permitting	~~120~~	~~397~~	~~928~~	1,445
Management/Implementation-Thinning/Roadwork	~~120~~	~~397~~	~~928~~	1,445
Management/Implementation-Young stand thinning	~~0~~	~~191~~	~~464~~	655

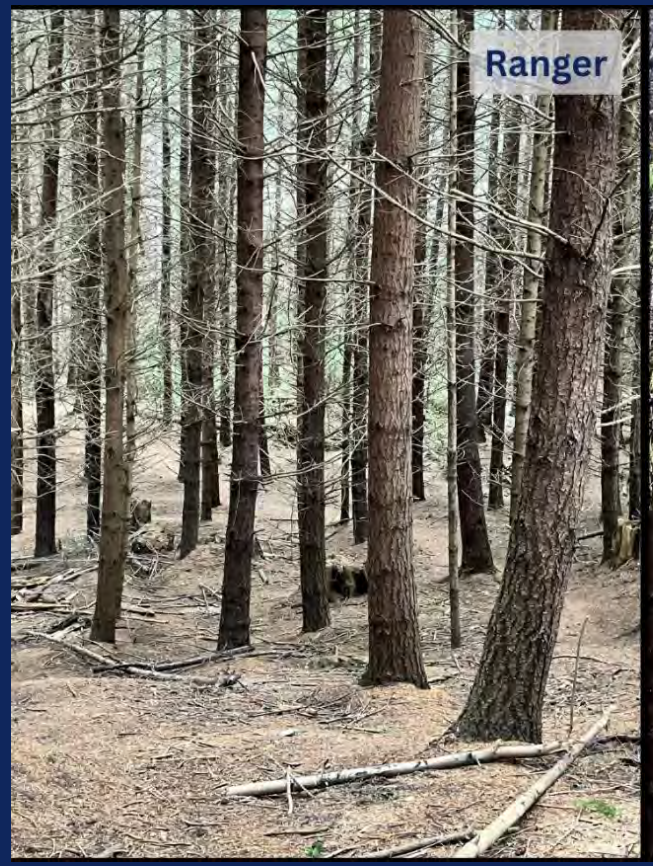
Actual and Projected Net Revenues and Program Costs Under Different Cost and Log Price Scenarios



Natural Resource Management

The mission of the Natural Resource Program is to restore, protect, and manage Kitsap County Parks' natural resources for current and future generations using science-based approaches and solutions while collaborating with and respecting all Kitsap County inhabitants and communities involved.


Ride Park North


Ranger


1200 East 1


1200 East